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INTEL CORPORATION
c/o INTELLEVATE, LLC
P.O. BOX 52050
MINNEAPOLIS, MN 55402

EXAMINER	
SHEPARD, JUSTIN E	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/788,838	NEOGI, RAJA	
	Examiner	Art Unit	
	Justin E. Shepard	2424	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 September 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-8 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The method claimed are not associated with an apparatus or system that would meet the statutory bar.

Claim 17-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The medium claimed is referred to as a wave or other non-statutory subject matter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 3, 6, 8, 17, 18, 19, 22, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agnihotri in view of Dorai in view of Schrempp in view of Chelehmal in view of Herrmann in view of Lifshitz.

Referring to claim 1, Agnihotri discloses a method, comprising:

determining, at a headend node, terminal node characteristics (column 18, lines 38-67);

selecting an algorithm and one or more control parameters for processing a fingerprint (column 8, line 67 to column 9, line 4; column 18, lines 38-67);

downloading the selected algorithm and one or more control parameters to a fingerprint control protocol (column 18, lines 38-67).

Agnihotri does not disclose a method wherein the terminal node characteristics include characteristics of a media network;

selecting an algorithm based on the determined terminal node characteristics;

transferring the fingerprint control protocol to a terminal node; and

wherein the fingerprint control protocol includes an Intemet protocol header, a user datagram protocol header, a real- time transport protocol header, a FlexMux header, and a synchronization laver header.

In an analogous art, Dorai teaches a method the terminal node characteristics include characteristics of a media network;

selecting an algorithm based on the determined terminal node characteristics (column 7, lines 1-26).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the bandwidth analysis taught by Dorai to the method disclosed by Agnihotri. The motivation would have been to enable a less accurate fingerprint to be created when bandwidth doesn't allow for a more accurate fingerprint to be created.

Agnihotri and Dorai do not disclose a method for transferring the fingerprint control protocol to a terminal node; and

wherein the fingerprint control protocol includes an Intemet protocol header, a user datagram protocol header, a real- time transport protocol header, a FlexMux header, and a synchronization laver header.

In an analogous art, Schrempp teaches a method for transferring the fingerprint control protocol to a terminal node (figure 6; paragraph 49).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the fingerprint transmitting taught by Schrempp to the method disclosed by Agnihotri and Dorai. The motivation would have been to enable the system to identify work that does not contain any identifying information.

Agnihotri, Dorai, and Schrempp do not disclose a method wherein the fingerprint control protocol includes an Intemet protocol header, a user datagram protocol header, a real- time transport protocol header, a FlexMux header, and a synchronization laver header.

In an analogous art, Chelehmal teaches a method wherein the fingerprint control protocol includes an Intemet protocol header, a user datagram protocol header, a real-time transport protocol header (figure 3; paragraphs 31).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the header data taught by Chelehmal to the method disclosed by Agnihotri, Dorai, and Schrempp. The motivation would have been to embed the data in an MPEG video stream to save bandwidth.

Agnihotri, Dorai, Schrempp, and Chelehmal do not disclose a method wherein the fingerprint control data includes a FlexMux header, and a synchronization laver header.

In an analogous art, Herrmann teaches a method wherein the fingerprint control data includes a FlexMux header (column 4, line 53 to column 5, line 9).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the FlexMux header taught by Herrmann to the method disclosed by Agnihotri, Dorai, Schrempp, and Chelehmal. The motivation would have been to enable a more flexible way of interleaving the packets of data.

Agnihotri, Dorai, Schrempp, Chelehmal, and Herrmann do not disclose a method wherein the fingerprint control data includes a synchronization laver header.

In an analogous art, Lifshitz teaches a method wherein the fingerprint control data includes a synchronization laver header (page 3, line 21 to page 4, line 4).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the SL header taught by Lifshitz to the method disclosed by Agnihotri, Dorai, Schrempp, Chelehmal, and Herrmann. The motivation would have been to make sure that video data is synchronized at the receiver.

Claim 17 is rejected on the same grounds as claim 1.

Referring to claim 2, Agnihotri discloses a method of claim 1, further comprising: utilizing, at the terminal node, the fingerprint control protocol to process the fingerprint (column 8, line 67 to column 9, line 4).

Claim 18 is rejected on the same grounds as claim 2.

Referring to claim 3, Agnihotri discloses a method of claim 2, wherein utilizing, at the terminal node, the fingerprint control protocol to process the fingerprint, comprises: generating the fingerprint (column 8, line 67 to column 9, line 4).

Agnihotri and Dorai do not disclose a method for forwarding the fingerprint to the headend node for verification.

In an analogous art, Schrempp teaches a method for forwarding the fingerprint to the headend node for verification (figure 6; paragraph 49).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the fingerprint transmitting taught by Schrempp to the method disclosed by Agnihotri and Dorai. The motivation would have been to enable the system to identify work that does not contain any identifying information.

Claim 19 is rejected on the same grounds as claim 3.

Referring to claim 6, Agnihotri discloses a method of claim 1, wherein the fingerprint is a video fingerprint (column 8, line 67 to column 9, line 4).

Claim 22 is rejected on the same grounds as claim 6.

Referring to claim 8, Agnihotri discloses a method of claim 1, wherein the fingerprint control protocol is an application level control protocol (column 18, lines 38-67).

Claim 24 is rejected on the same grounds as claim 8.

Claims 4 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agnihotri, Dorai, Schrempp, Chelehmal, and Herrmann as applied to the claims above, and further in view of Matsunaga.

Referring to claim 4, Agnihotri, Dorai, Schrempp, Chelehmal, and Herrmann do not disclose a method of claim 1, further comprising: periodically checking the terminal node characteristics to adjust the selected algorithm and one or more control parameters.

In an analogous art, Matsunaga teaches a method of claim 1, further comprising: periodically checking the terminal node characteristics to adjust the selected algorithm and one or more control parameters (column 3, lines 46-59).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the bandwidth checking taught by Matsunaga to the method disclosed by Agnihotri, Dorai, Schrempp, Chelehmal, and Herrmann. The motivation would have been to enable the headend to track the algorithm being used by each terminal.

Claim 20 is rejected on the same grounds as claim 4.

Claims 5 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agnihotri, Dorai, Schrempp, Chelehmal, and Herrmann as applied to the claims above, and further in view of Bjorgan.

Referring to claim 5, Agnihotri, Dorai, Schrempp, Chelehmal, and Herrmann do not disclose a method of claim 1, wherein the fingerprint control protocol includes data that is packed into one or more MPEG elementary streams.

In an analogous art, Bjorgan teaches a method of claim 1, wherein the fingerprint control protocol includes data that is packed into one or more MPEG elementary streams (paragraph 56).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the MPEG stream data delivery taught by Bjorgan to the method disclosed by Agnihotri, Dorai, Schrempp, Chelehmal, and Herrmann. The motivation would have been to allow for spare space to be used in the MPEG stream, thereby conserving bandwidth.

Claim 21 is rejected on the same grounds as claim 5.

Claims 7 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agnihotri, Dorai, Schrempp, Chelehmal, and Herrmann as applied to the claims above, and further in view of Ellis.

Referring to claim 7, Agnihotri, Dorai, Schrempp, Chelehmal, and Herrmann do not disclose a method of claim 1, wherein the fingerprint is an audio fingerprint.

In an analogous art, Ellis teaches a method of claim 1, wherein the fingerprint is an audio fingerprint (column 10, lines 12-20).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the audio fingerprint taught by Ellis to the method disclosed by Agnihotri, Dorai, Schrempp, Chelehmal, and Herrmann. The motivation would have been to enable the system to create a more accurate fingerprint.

Claim 23 is rejected on the same grounds as claim 7.

Claims 9, 10, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agnihotri in view of Dorai in view of Chelehmal in view of Herrmann in view of Lifshitz.

Referring to claim 9, Agnihotri discloses a system, comprising:

a headend node, wherein the headend node determines terminal node characteristics, wherein the headend node selects an algorithm and one or more control parameters to process a fingerprint, and wherein the headend node downloads the selected algorithm and control parameters to a fingerprint control protocol (column 8, line 67 to column 9, line 4; column 18, lines 38-67).

Agnihotri does not disclose a method wherein the terminal node characteristics include characteristics of a media network;

selects an algorithm and one or more control parameters to process a fingerprint based on the determined terminal node characteristics; and

wherein the fingerprint control protocol includes an Intemet protocol header, a user datagram protocol header, a real- time transport protocol header, a FlexMux header, and a synchronization laver header.

In an analogous art, Dorai teaches a method wherein the terminal node characteristics include characteristics of a media network;

selects an algorithm and one or more control parameters to process a fingerprint based on the determined terminal node characteristics (column 7, lines 1-26).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the bandwidth analysis taught by Dorai to the method disclosed by Agnihotri. The motivation would have been to enable a less accurate fingerprint to be created when bandwidth doesn't allow for a more accurate fingerprint to be created.

Agnihotri and Dorai do not disclose a method wherein the fingerprint control protocol includes an Intemet protocol header, a user datagram protocol header, a real-time transport protocol header, a FlexMux header, and a synchronization laver header.

In an analogous art, Chelehmal teaches a method wherein the fingerprint control protocol includes an Intemet protocol header, a user datagram protocol header, a real-time transport protocol header (figure 3; paragraphs 31).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the header data taught by Chelehmal to the method disclosed by Agnihotri and Dorai. The motivation would have been to embed the data in an MPEG video stream to save bandwidth.

Agnihotri, Dorai, and Chelehmal do not disclose a method wherein the fingerprint control data includes a FlexMux header, and a synchronization laver header.

In an analogous art, Herrmann teaches a method wherein the fingerprint control data includes a FlexMux header (column 4, line 53 to column 5, line 9).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the FlexMux header taught by Herrmann to the method disclosed by Agnihotri, Dorai, and Chelehmal. The motivation would have been to enable a more flexible way of interleaving the packets of data.

Agnihotri, Dorai, Chelehmal, and Herrmann do not disclose a method wherein the fingerprint control data includes a synchronization laver header.

In an analogous art, Lifshitz teaches a method wherein the fingerprint control data includes a synchronization laver header (page 3, line 21 to page 4, line 4).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the SL header taught by Lifshitz to the method disclosed by Agnihotri, Dorai, Chelehmal, and Herrmann. The motivation would have been to make sure that video data is synchronized at the receiver.

Referring to claim 10, Agnihotri discloses a system of claim 9, further comprising: a terminal node, wherein the terminal node receives the fingerprint control protocol from the headend node and uses the fingerprint control protocol to process the fingerprint (column 8, line 67 to column 9, line 4).

Referring to claim 14, Agnihotri discloses a system of claim 9, wherein the fingerprint is a video fingerprint (column 8, line 67 to column 9, line 4).

Referring to claim 16, Agnihotri discloses a system of claim 9, wherein the fingerprint control protocol is an application level control protocol (column 18, lines 38-67).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Agnihotri, Dorai, Chelehmal, and Herrmann as applied to claim 9 above, and further in view of Schrempp.

Referring to claim 11, Agnihotri, Dorai, Chelehmal, and Herrmann do not disclose a system of claim 10, wherein the terminal node generates the fingerprint and forwards the fingerprint to the headend node for verification.

In an analogous art, Schrempp teaches a system of claim 10, wherein the terminal node generates the fingerprint and forwards the fingerprint to the headend node for verification (figure 6; paragraph 49).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the fingerprint transmitting taught by Schrempp to the method disclosed by Agnihotri, Dorai, Chelehmal, and Herrmann. The motivation would have been to enable the system to identify work that does not contain any identifying information.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Agnihotri, Dorai, Chelehmal, and Herrmann as applied to claim 9 above, and further in view of Matsunaga.

Referring to claim 12, Agnihotri, Dorai, Chelehmal, and Herrmann do not disclose a system of claim 9, wherein the headend node periodically checks the terminal node characteristics to adjust the selected algorithm and one or more control parameters.

In an analogous art, Matsunaga teaches a system of claim 9, wherein the headend node periodically checks the terminal node characteristics to adjust the selected algorithm and one or more control parameters (column 3, lines 46-59).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the bandwidth checking taught by Matsunaga to the method disclosed by Agnihotri, Dorai, Chelehmal, and Herrmann. The motivation would have been to enable the headend to track the algorithm being used by each terminal.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Agnihotri, Dorai, Chelehmal, and Herrmann as applied to claim 9 above, and further in view of Bjorgan.

Referring to claim 13, Agnihotri, Dorai, Chelehmal, and Herrmann does not disclose a system of claim 9, wherein the fingerprint control protocol includes data that is packed into one or more MPEG elementary streams.

In an analogous art, Bjorgan teaches a system of claim 9, wherein the fingerprint control protocol includes data that is packed into one or more MPEG elementary streams (paragraph 56).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the MPEG stream data delivery taught by Bjorgan to the method disclosed by Agnihotri, Dorai, Chelehmal, and Herrmann. The motivation would have been to allow for spare space to be used in the MPEG stream, thereby conserving bandwidth.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Agnihotri, Dorai, Chelehmal, and Herrmann as applied to claim 9 above, and further in view of Ellis.

Referring to claim 15, Agnihotri, Dorai, Chelehmal, and Herrmann do not disclose a system of claim 9, wherein the fingerprint is an audio fingerprint.

In an analogous art, Ellis teaches a system of claim 9, wherein the fingerprint is an audio fingerprint (column 10, lines 12-20).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the audio fingerprint taught by Ellis to the method disclosed by Agnihotri, Dorai, Chelehmal, and Herrmann. The motivation would have been to enable the system to create a more accurate fingerprint.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Immega (US 2003/0140235 A1) teaches modifying the amount of image data transmitted depending on the bandwidth available.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin E. Shepard whose telephone number is (571) 272-5967. The examiner can normally be reached on 7:30-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JS

/Annan Q Shang/
Primary Examiner, Art Unit 2424